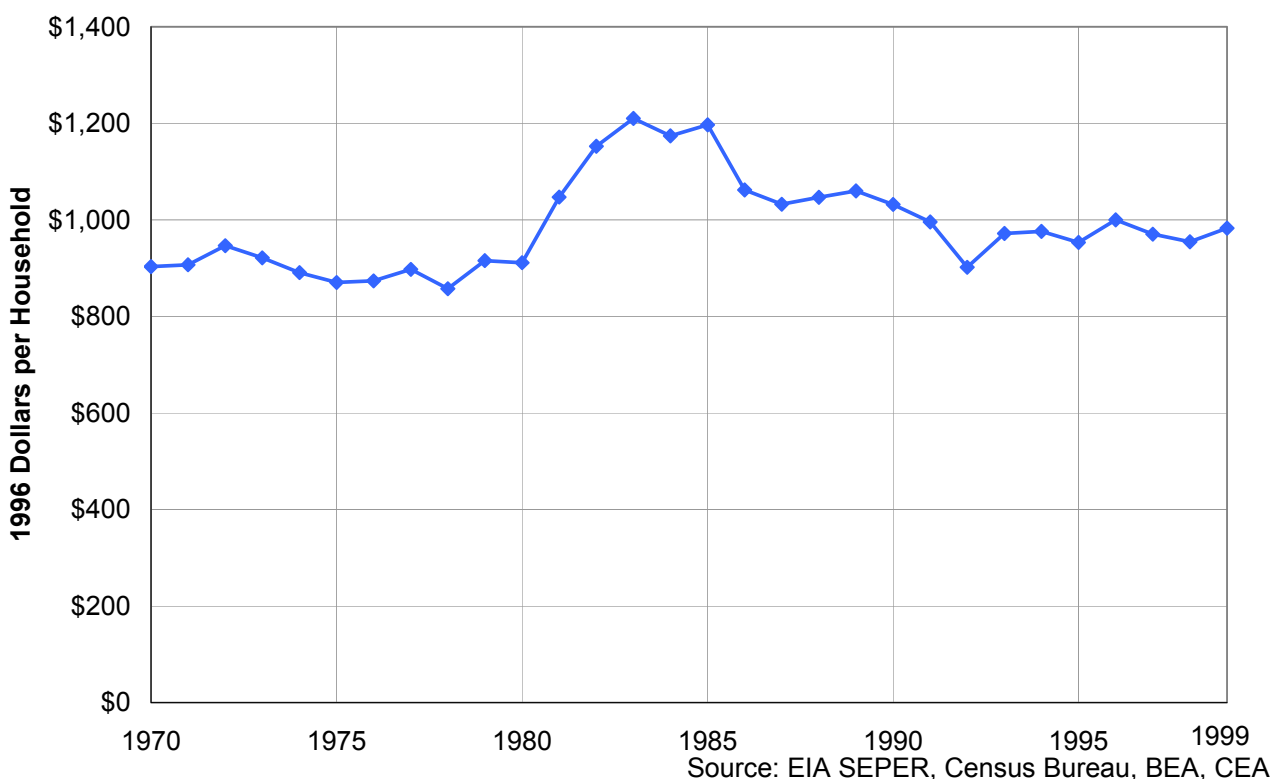


10. Residential Sector Trends — Household Energy Bill

Residential Energy Expenditures per Household (1970-1999)



ADJUSTED FOR INFLATION, THE AVERAGE WASHINGTON HOUSEHOLD SPENT 9% MORE FOR HOME ENERGY IN 1999 THAN IN 1970. IMPROVEMENTS IN HOUSEHOLD ENERGY EFFICIENCY AND FUEL SWITCHING TO LESS EXPENSIVE ENERGY SOURCES HAVE OFFSET HIGHER ELECTRICITY PRICES.

In 1999, the average Washington household spent the inflation-adjusted sum of \$983 (1996 dollars) for electricity, natural gas, and petroleum delivered to the home, roughly \$80 more than in 1970. This outward similarity masks significant changes in the composition of household energy expenditures over the last 25 years. Increased emphasis on energy conservation and fuel switching from heating oil to wood helped to mitigate the impact of the oil shocks of the 1970s on the home energy bill of Washington households. However, there is no immediate substitute for electricity, so when electricity prices increased by 62% between 1980 and 1983, due largely to the inclusion in rates of the WPPSS nuclear bonds, the average household electricity bill increased by a like amount.

Over time, energy efficiency and fuel switching have helped reduce reliance on relatively expensive electricity. Most new homes are being built with natural gas heat and water heating (78% in 1998) and numerous existing households have switched to natural gas as well. Electricity usage per household fell 11% between 1985 and 1999 while natural gas usage increased 66%. Switching to a less expensive fuel produces significant cost savings.